

IN THE CLAIMS:

1. (Previously Presented) A device for mixing fibers in a gaseous flow, the device comprising:

a pervious forming wire;

a forming head facing a first side of said forming wire;

5 a suction box facing a second side of said forming wire;

a fiber feeding duct for feeding fibers suspended in a gaseous flow into said forming head, said duct having an end in communication with an interior of said forming head;

10 a fiber mixing device arranged in an intermediate position along said fiber feeding duct, said fiber mixing device being upstream of said forming head, said fiber mixing device including an inlet side and an outlet side, said fiber mixing device including at least a first pair of rotors on the inlet side and a second pair of rotors on the outlet side, said rotors having radially projecting elements, said rotors being arranged such that each rotation axis of each rotor is substantially orthogonal to said gaseous flow.

2. (Previously Presented) Device according to claim 1, wherein the rotors of each pair have axes of rotation parallel to each other.

3. (Previously Presented) Device according to claim 1, wherein the rotors of the various pairs have axes of rotation parallel to each other.

4. (Previously Presented) Device according to claim 2, wherein the rotors of the various pairs have axes of rotation parallel to each other.

5. (Previously Presented) Device according to claim 1, wherein the rotors of the first pair rotate in opposite directions to each other and the rotors of the second pair rotate in opposite directions to each other.

6. (Previously Presented) Device according to claim 5, wherein the rotors of the first pair rotate such that a denser arrangement of the fibers is produced in the passing flow toward the central zone of the duct, said rotors of the second pair rotating such that a denser arrangement of the fibers is produced in the passing flow toward the peripheral zone of the duct.

7. (Previously Presented) Device according to claim 5, wherein the rotors of the first pair rotate such that a denser arrangement of the fibers is produced in the passing flow toward the peripheral zone of the duct, said rotors of the second pair rotating such that a denser arrangement of the fibers is produced in the passing flow toward the central zone of the duct.

8. (Previously Presented) Device according to claim 1, wherein the radial elements of said rotors comprise rod-shaped members connected to a respective rotating shaft.

9. (Previously Presented) Device according to claim 1, wherein said duct has at least one portion with a rectangular or square cross-section, in which said rotors are inserted.

10. (Previously Presented) Device according to claim 1, wherein said radial elements have an extension such that the envelopes of adjacent rotors interfere with each other.

11. (Canceled)

12. (Previously Presented) Device according to claim 1, wherein said rotors are actuated at a variable speed.

13. (Canceled)

14. (Previously Presented) A method for forming a strip-shaped fibrous article, comprising the steps of:

supplying fibers suspended in a gaseous flow to a forming head via a supply duct;

depositing a layer of fibers onto a movable forming wire via said forming head;

5       arranging in said supply duct at least a first pair of rotors and at least a second pair of rotors, said first pair of rotors being arranged adjacent said second pair of rotors in a direction of the gaseous flow within said supply duct;

counter-rotating the rotors of each pair about axes perpendicular to the gaseous flow

within said duct;

10                    mixing said fibers in a gaseous suspension inside said supply duct via said rotors before feeding said fibers to said forming head.

15. (Previously Presented) Method according to claim 14, further comprising the step of producing a denser arrangement of fibers in the central zone of the duct and subsequently a denser arrangement of the fibers in the peripheral zone of the supply duct.

16. (Previously Presented) Method according to claim 14, further comprising the step of producing a denser arrangement of fibers in the peripheral zone of the duct and subsequently a denser arrangement of fibers in the central zone of the supply duct by means of said two pairs of rotors.

17. (Previously Presented) A device for mixing fibers in a gaseous flow, the device comprising:

5                    a duct for suspending fibers in a gaseous flow, with an inlet and an outlet and, between said inlet and said outlet, at least a first pair of rotors on the inlet side and a second pair of rotors on the outlet side, said rotors being arranged perpendicular to said flow and equipped with radial elements, wherein said duct has a transversal cross-section which is smaller than said inlet and said outlet.